DIVISION OF MINES AND GEOLOGY
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MELVILLE LAKE QUADRANGLE
CALIFORNIA—SAN BERNARDINO CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)
NE/4 OLD WOMAN SPRINGS 15' QUADRANGLE

MAP EXPLANATION

Surface fault rupture associated with the 1992 Landers earthquake, based on mapping by DMG, USGS, and CIT.

Faults zoned for special studies in 1988, based on mapping by Manson (1986a and 1986b), Morton and others (1980), and Dibblee (1967). Refer to SSZ map explanation below.

Recently active faults mapped by Bryant (this report), based on air photo interpretation. Solid line indicates well-defined features, dashed where approximately located, short dash where inferred, dotted where concealed, queried where uncertain.

Locality referred to in text.

Figure 2a (to FER-239). 1988 Official Special Studies Zones Map of the Melville Lake quadrangle, showing surface fault rupture associated with the 28 June 1992 Landers earthquake. Faults shown in red or highlighted in yellow are recommended for zoning (revision) for Special Studies.

TOPOGRAPHIC BASE MAP BY U.S. GEOLOGICAL SURVEY 1972

NOTICE
Effective January 1, 1994, the name "Special Studies Zones" has been changed to "Earthquake Fault Zones" and Chap. 7.5, Div. 2, of the Public Resources Code has been renamed the "Alquist-Priolo Earthquake Fault Zoning Act."

MAP EXPLANATION

Potentially Active Faults

1906 C — Faults considered to have been active during Holocene time and to have a relatively high potential for surface rupture; solid line where accurately located, long dash where approximately located, short dash where inferred, dotted where concealed; query (?) indicates additional uncertainty. Evidence of historic offset indicated by year of earthquake-associated event or C for displacement caused by creep or possible creep.

Special Studies Zone Boundaries

These are delineated as straight-line segments that connect encircled turning points so as to define special studies zone segments.

Seaward projection of zone boundary.

CONTOUR INTERVAL 20 FEET
DOTTED LINES REPRESENT 10-FOOT CONTOURS
NATIONAL GEODETIC VERTICAL DATUM OF 1929

STATE OF CALIFORNIA
SPECIAL STUDIES ZONES

Delineated in compliance with
Chapter 7.5, Division 2 of the California Public Resources Code
(Alquist-Priolo Special Studies Zones Act)

MELVILLE LAKE QUADRANGLE

OFFICIAL MAP
Effective: March 1, 1988

Brian E. Tucker — Acting State Geologist

REFERENCES USED TO COMPILE FAULT DATA

Melville Lake Quadrangle

Dibblee, T.W., Jr., 1967, Geologic map of the Old Woman Springs quadrangle, San Bernardino County, California: U.S. Geological Survey Miscellaneous Geologic Investigations Map I-518, 5p., 1 plate, scale 1:62,500.

Manson, M.W., 1986, Homestead Valley fault, Johnson Valley fault, and associated faults, San Bernardino County, California: California Division of Mines and Geology Fault Evaluation Report FER-180 (unpublished).

Manson, M.W., 1986, Camp Rock, Emerson, Galway Lake, Homestead Valley (north end), and associated faults, San Bernardino County: California Division of Mines and Geology Fault Evaluation Report FER-183 (unpublished).

Morton, D.M., Miller, F.K., and Smith, C.C., 1980, Photoreconnaissance maps showing young-looking fault features in the southern Mojave Desert, California: U.S. Geological Survey Miscellaneous Field Studies Map MF-1051, 7 sheets, scales 1:24,000 and 1:62,500.

For additional information on faults in this map area, the rationale used for zoning, and additional references consulted, refer to unpublished Fault Evaluation Reports on file at regional offices of DMG.

IMPORTANT – PLEASE NOTE

1) *This map may not show all faults that have the potential for surface fault rupture, either within the special studies zones or outside their boundaries.*
2) Faults shown are the basis for establishing the boundaries of the special studies zones.
3) The identification and location of these faults are based on the best available data. However, the quality of data used is varied. Traces have been drawn as accurately as possible at this map scale.
4) Fault information on this map is not sufficent to serve as a substitute for the geologic site investigations (special studies) required under Chapter 7.5 of Division 2 of the California Public Resources Code.

239-1